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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

RAMPURIA, SHARAD K

ART UNIT PAPER NUMBER

2683

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/086,673

Applicant(s)

JAGADEESAN, RAMANATHAN T.

Examiner

Sharad Rampuria

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 February 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-99 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-99 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

***Response to Amendment***

Applicant's arguments with respect to claims 1-99 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

I. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-16, 19-28, 31-39, 42-51, 54-62, 65-74, 77-85, & 88-97 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kallio [US 20020147008] in view of Wilhoite et al. [US 20030224795].

1. Regarding claim 1, Kallio disclose a wireless telephone device (150; fig.1) comprising: a physical component for wireless communication; and a processor coupled with the physical component, (pg.2; 0024)

in which the processor is adapted to establish an original leg of a telephone call connection using one of a CSV modality and a VOX modality; (pg.5; 0043)

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transfer data of a voice conversation between the original leg and a voice channel that terminates in one of a speaker and a microphone pursuant to the telephone call connection; (pg.6; 0050) establish from the handoff call an alternate leg of the telephone call connection using the other one of the two modalities while the original leg is still established; (pg.6; 0050)and then transfer data of the voice conversation between the voice channel and the alternate leg pursuant to the telephone call connection. (pg.6; 0050)

Kallio fails to disclose an access address. However, Wilhoite teaches in an analogous art, that receive an address signal encoding an access address; wherein the access address identifies an handoff device; make a handoff call to the handoff device responsive to receiving the address signal; (Pg.9; 0100 & 0103) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include an access address in order to provide a method of call routing in a wireless telephone system.

2. Regarding claim 2, Kallio disclose the device of claim 1, in which the processor is further adapted to: couple the alternate leg with the voice channel for transferring data between them. (pg.5; 0043)

3. Regarding claim 3, Kallio disclose the device of claim 1, in which the processor is further adapted to: tear down the original leg while transferring data of the voice conversation between the voice channel and the alternate leg. (pg.6; 0050)

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4. Regarding claim 4, Kallio disclose the device of claim 1, in which the processor is further adapted to: exchange a modality handoff signal after transferring voice data over the original leg, and in which the address signal is received responsive to exchanging the modality handoff signal. (pg.6; 0050)

5. Regarding claim 5, Kallio disclose the device of claim 4, in which exchanging the modality handoff signal is performed by transmitting it over the original leg. (pg.6; 0050)

6. Regarding claim 6, Kallio disclose the device of claim 4, in which exchanging the modality handoff signal is performed by receiving it over the original leg. (pg.6; 0050)

7. Regarding claim 7, Kallio disclose all the particulars of the claim except transmitting it to the first address performs exchanging the modality handoff signal. However, Wilhoite teaches in an analogous art, that the device of claim 4, in which the processor is further adapted to: access a registration server to learn a first address; and in which exchanging the modality handoff signal is performed by transmitting it to the first address. (Pg.9; 0100 & 0103) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include transmitting it to the first address performs exchanging the modality handoff signal in order to provide a method of call routing in a wireless telephone system.

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8. Regarding claims 8, 19, 31, 42, 54, 65, 77, & 88, Kallio disclose a network switch (120; fig.1) comprising: a network interface for coupling to a network; and a processor coupled with the network interfaces, (pg.2; 0024)

and Regarding claims 54 & 65 Kallio disclose an article comprising: a storage medium, the storage medium having instructions stored thereon, in which when the instructions are executed by at least one device, (pg.3; 0026) they result in:

in which the processor is adapted to establish an original leg of a telephone call connection using one of a CSV modality and a VOX modality; (pg.5; 0043)

transfer data of a voice conversation between the original leg and a voice channel that terminates in one of a speaker and a microphone pursuant to the telephone call connection; (pg.6; 0050)

establish from the handoff call an alternate leg of the telephone call connection using the other one of the two modalities while the original leg is still established; (pg.6; 0050)and

then transfer data of the voice conversation between the voice channel and the alternate leg pursuant to the telephone call connection. (pg.6; 0050)

Kallio fails to disclose an access address. However, Wilhoite teaches in an analogous art, that receive an address signal encoding an access address; wherein the access address identifies an handoff device; make a handoff call to the handoff device responsive to receiving the address signal; (Pg.9; 0100 & 0103) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include an access address in order to provide a method of call routing in a wireless telephone system.

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9. Regarding claims 9, 20, 32, 43, 55, 66, 78, & 89, Kallio disclose the network switch of claim 8, in which the processor is further adapted to: couple the alternate leg with the voice channel for transferring data between them. (pg.5; 0043)

10. Regarding claims 10, 21, 33, 44, 56, 67, 79, & 90, Kallio disclose the network switch of claim 8, in which the processor is further adapted to: tear down the original leg while transferring data of the voice conversation between the voice channel and the alternate leg. (pg.6; 0050)

11. Regarding claims 11, 23, 34, 46, 57, 69, 80, & 92, Kallio disclose the network switch of claim 8, in which the processor is further adapted to: exchange a modality handoff signal after transferring voice data over the original leg, and in which the address signal is received responsive to exchanging the modality handoff signal. (pg.6; 0050)

12. Regarding claims 12, 24, 35, 47, 58, 70, 81, & 93, Kallio disclose the network switch of claim 11, in which exchanging the modality handoff signal is performed by transmitting it over the original leg. (pg.6; 0050)

13. Regarding claims 13, 25, 36, 48, 59, 71, 82, & 94, Kallio disclose the network switch of claim 11, in which exchanging the modality handoff signal is performed by receiving it over the original leg. (pg.6; 0050)

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14. Regarding claims 14, 26, 37, 49, 60, 72, 83, & 95, Kallio disclose all the particulars of the claim except transmitting it to the first address performs exchanging the modality handoff signal. However, Wilhoite teaches in an analogous art, that the network switch of claim 11, in which the processor is further adapted to: access a registration server to learn a first address; and in which exchanging the modality handoff signal is performed by transmitting it to the first address. (Pg.9; 0100 & 0103) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include transmitting it to the first address performs exchanging the modality handoff signal in order to provide a method of call routing in a wireless telephone system.

15. Regarding claims 15, 27, 38, 50, 61, 73, 84, & 96, Kallio disclose the network switch of claim 8, in which the processor is further adapted to: receive data from both the original leg and the alternate leg; and combine the data received from the original leg and from the alternate leg to form a combined data stream of a single one of the CSV and VOX modalities. (pg.3; 0025)

16. Regarding claims 16, 28, 39, 51, 62, 74, 85, & 97, Kallio disclose the network switch of claim 15, in which the processor is further adapted to: convert the data received from one of the original leg and the alternate leg to be of the other one of the CSV and VOX modalities prior to combining. (pg.3; 0025)

91. Regarding claims 22, 45, 68 & 91, Kallio disclose the method of claim 88, further comprising: receiving an identity code about the original leg; and using the identity code for coupling the voice channel with the alternate leg. (pg.6; 0050)



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Claims 17-18, 29-30, 40-41, 52-53, 63-64, 75-76, 86-87, & 98-99 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kallio & Wilhoite further in view of Gilhousen et al. [US 5101501] (hereinafter Gilhousen).

17. Regarding claims 17, 29, 40, 75, 86, & 98 the above combination discloses all the particulars of the claim except adjusting a delay in one of the original leg and the alternate leg according to the difference. However, Gilhousen teaches in an analogous art, that the network switch of claim 15, in which the processor is further adapted to: determine a difference in delay between transferring data along the original leg and the alternate leg; and adjusting a delay in one of the original leg and the alternate leg according to the difference. (col.3; 50-65 & col.9; 59-col.10; 4) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include adjusting a delay in one of the original leg and the alternate leg according to the difference in order to provide synchronization in make-before-break handoff mechanism.

18. Regarding claims 18, 30, 41, 76, 87, & 99, the above combination discloses all the particulars of the claim except analyze the exchange of data to detect a silent period. However, Gilhousen teaches in an analogous art, that the network switch of claim 8, in which the processor is further adapted to: receive data from both the original leg and the alternate leg; and analyze the exchange of data to detect a silent period. (col.3; 50-65 & col.9; 59-col.10; 4) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include analyze

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the exchange of data to detect a silent period in order to provide synchronization in make-before-break handoff mechanism.

### *Conclusion*

II. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharad Rampuria whose telephone number is (571) 272-7870. The examiner can normally be reached on Mon-Fri. (8:10-4:40).


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application June be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications June be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or [EBC@uspto.gov](mailto:EBC@uspto.gov).

Sharad Rampuria  
Examiner  
Art Unit 2683

June 8, 2005

  
**WILLIAM TROST**  
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